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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,345	05/15/2001	Akira Shirahama	SONYJP 3.0-166	8840

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EXAMINER

YENKE, BRIAN P

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/855,345

Applicant(s)

SHIRAHAMA ET AL.

Examiner

BRIAN P. YENKE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE 21 June 04/Amend 27 May 04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-11 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11 and 13-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 June 2004 has been entered.

2. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3a. Claims 1-2, 6-9, 13-17, 19-20 and 22-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneda, US 6,609,251 in view of Moon, US 6,501,510.

In considering claims 1, 8 and 15,

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- a) the claimed an extraction unit operable to extract image data of a selected program* is met by receiving unit 210 where separating unit 2 (Fig 1)(col 14, line 55-58) extracts video and service information from the multiplexed data.
- b) the claimed an acquisition unit operable to acquire image encoded information of the selected program extracted by the extraction unit* is met by the identification information storage unit 5 (Fig 1, col 14, line 61-64) which identifies/obtains the scanning method of the separated video data, which is then subsequently decoded via non-interlace decoding unit 3 or interlace video decoding unit 4 (Fig 1).
- c) the claimed a setting unit operable to set a signal processing parameter for processing an image signal of the selected program in accordance with the image encoded information* is met by scan method instructing unit 7 which decides a scanning method of the video data selected by the operator on the basis of information stored in the identification storage unit, where instructing unit 7 gives an instruction to decode the signal by the non-interlace video decoding unit 3 or the interlace video decoding unit 4 (Fig 1)(col 15, line 4-10).

However, Yoneda remains silent on the decoded signal including a luminance signal and a color difference signal and processing (via processing unit) the luminance/color difference signals into RGB signals.

Although, the reception of composite signals (which include luminance and color difference signals) which may be converted (processed) into a component signal (i.e. RGB) is conventional in the art the examiner nonetheless incorporates this conventional feature. The reason composite signals are

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converted into component signals is unwanted effects such as cross color that result in a composite signal from the mixing of the luminance and chrominance information is avoided, thereby providing the viewer an ideally better picture.

The examiner relies on Moon, which discloses a receiver system, which can receive both analog and digital signals, where the system receives the composite video signal and decodes (via color decoder 115) the received signal into a luminance/color difference signal (col 4, line 35-45) which is compensated for phase/frequency via processor 116 and then converted into a component signal (RGB) via RGB matrix processor 117.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify Yoneda which discloses the reception of a analog signals which are decoded/processed for display, with Moon by decoding the composite signal and converting the composite signal into a component signal (RGB), in order to provide the viewer a better picture for display.

In considering claims 2 and 9,

a) the claimed said extraction unit extracts said image data of the selected program from a transport stream is met where receiving unit 210, extracts the image and audio data using separating unit 2 (Fig 2), where the received signal is a transport stream (abstract, lines 1-10).

b) the claimed said acquisition unit acquires the image encoded information from service information included in the transport stream is met where identification information storage unit 5 which identifies/obtains the scanning method of the

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separated video data from the service information separated and extracted by the separating unit (col 14, line 55-64) which is subsequently decoded by the non-interlace decoding unit 3 or interlace decoding unit 4 (Fig 1).

In considering claim 6,

The claimed further comprising a display operable to display the processed image signals is met by video display 8 which display the image signal after being decoded by non-interlace video decoding unit 3 and interlace video decoding unit 4.

In considering claim 7,

The claimed wherein the display of the processed image signal is adjusted in accordance with the image encoded information is met where the video display 8 is controlled by either non-interlace video decoding unit 3 or interlace video decoding unit 4 based on the encoded information received/identified.

In considering claim 13,

The claimed further comprising displaying the processed image signals is met by video display 8 which display the image signal after being decoded by non-interlace video decoding unit 3 and interlace video decoding unit 4.

In considering claim 14,

The claimed wherein said displaying step includes adjusting the processed image signals in accordance with the image encoded information is met where the video display 8 is controlled by either non-interlace video decoding unit 3 or

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interlace video decoding unit 4 based on the encoded information received/identified.

In considering claims 16, 19 and 22,

The combination of Yoneda and Moon does not specifically disclose the encoding parameters being selected from the group consisting of profile/level designation, number of horizontal pixels, number of vertical lines, aspect ratio, bit rate, frame rate, color initial value, conversion characteristic, matrix coefficient, and repeat first flag.

The parameters as claimed above, include notoriously well known parameters which may be included in a digital stream. Therefore, the examiner takes "OFFICIAL NOTICE" in regards to a signal encoded with information from the group as claimed above.

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to modify the Yoneda and Moon which disclose the reception of a digital signal and receives additional encoded information in order to the display signal in the appropriate format, by also receiving additional information (as claimed) related to the received signal which in order to provide the user/system the ability to process/decode/display the signal based upon the signals characteristics/parameters.

In considering claims 17, 20 and 23,

The combination of Yoneda and Moon does not specifically disclose controlling the display setting from the group of noise reduction, beam velocity modulation and gamma correction.

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The display settings as claimed above, include notoriously well known settings which a display system utilizes in order to display a coherent picture. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to modify Yoneda and Moon which disclose the reception of an digital signal and receives additional encoded information in order to the display signal in the appropriate format, by also controlling other display settings (as claimed) in order to provide the user the ability to view an optimized/ideal picture.

3b. Claims 1, 3-4, 6-8, 10-11, and 13-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim, US 6,188,439 in view of Moon, 6,501,510.

In considering claims 1, 8 and 15,

- a) the claimed an extracting unit operable to extract image data of a selected program is met by video and audio signal separation unit 8 (Fig 2) which separates the converted signal from processing unit 6 into a video signal and an audio signal (col 2, line 61-63), where the separated signal is the program/channel selected by the user via key input unit 20 (Fig 2).*
- b) the claimed an acquisition unit operable to operable to acquire video encoding parameters associated with the extracted image data of the selected program is met by genre data detecting unit 14 (Fig 2) which detects genre data from the separated video signal input from the video and audio signal separation unit 8 (col 3, line 3-5).*
- c) the claimed a setting unit operable to set at least one image signal parameter in accordance with the video encoding parameters, the at least one image signal*

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processing parameter being used to control processing of an image signal of the selected program to thereby control image quality of the selected program is met control unit 16 (Fig 2, col 3, line 11-21) which decodes the detected data by the genre data detection unit 14, and reads the video and audio control signal (stored in memory 18) corresponding to the genre data. The control data/parameters stored in memory 18 and read out by control unit 16 are based on the genre data/code (mode) detected from the incoming signal include the screen (brightness, color) and sound% (Fig 3).

However, Kim does not disclose the reception of a digital signal, nor decoding the digital data into a luminance/color difference signal (composite) and converting the composite signal into a RGB (component) signal.

Kim discloses a system which receives a broadcast signal where the additional encoded information is included in the VBI, thus being an analog broadcast signal.

A broadcast signal can be in either/both an analog or digital form, based of course on the reception area and broadcasters capabilities. It is also known that a digital broadcast signal provides a higher definition picture and typically provides an ideally better picture, of course based upon the reception area/receiver and transmission/broadcast capability.

Although, the reception of composite signals (which include luminance and color difference signals) which may be converted (processed) into a component signal (i.e. RGB) is conventional in the art the examiner nonetheless incorporates this conventional feature. The reason composite signals are

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converted into component signals is unwanted effects such as cross color that result in a composite signal from the mixing of the luminance and chrominance information is avoided, thereby providing the viewer an ideally better picture.

The examiner relies on Moon, which discloses a receiver system, which can receive both analog and digital signals, where the system receives the composite video signal and decodes (via color decoder 115) the received signal into a luminance/color difference signal (col 4, line 35-45) which is compensated for phase/frequency via processor 116 and then converted into a component signal (RGB) via RGB matrix processor 117.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify Kim which discloses the reception of a analog signals which are decoded/processed for display, with Moon by receiving digital signals where the received digital signals are decoded into a composite signal which is then converted into a component signal (RGB), in order to provide the viewer a better picture for display.

In considering claims 3, 18 and 21,

The claimed further comprising a storage device operable to store the at least one image signal processing parameter is met where the control data/parameters stored in memory 18 and read out by control unit 16 are based on the genre data/code (mode) detected from the incoming signal include the screen (bright, color) and sound% (Fig 3).

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In considering claim 4,

The claimed further comprising a changing unit operable to change the at least one image processing parameter on the basis of an input from a user is met where based upon the channel selected from the user via key input 20 and the genre is detected via detecting unit 14, the control unit 14 adjusts the video and audio control signal (stored in memory 18) corresponding to the genre data detected.

In considering claim 6,

The claimed further comprising a display operable to display the image signal of the selected program after processing is met by cathode ray tube (CRT) 24 (Fig 2).

In considering claim 7,

The claimed wherein the display is controlled in accordance with the video encoding parameters is met where CRT 24 is controlled by video signal processing unit 12 which receives the separated video via separation unit 8 and the control signal via control unit 16. The encoded genre information which is encoded is detected via data detecting unit 14 and decoded via control unit 16, which then implements control of video signal processing unit 12 and CRT 24 (Fig 2).

In considering claim 10,

The claimed further comprising storing the at least one image signal... is met where the control data/parameters stored in memory 18 and read out by control

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unit 16 are based on the genre data/code (mode) detected from the incoming signal include the screen (bright, color) and sound% (Fig 3).

In considering claim 11,

The claimed further comprising changing the at least one image processing parameter on the basis of an input from a user is met where based upon the channel selected from the user via key input 20 and the genre is detected via detecting unit 14, the control unit 14 adjusts the video and audio control signal (stored in memory 18) corresponding to the genre data detected.

In considering claim 13,

The claimed further comprising displaying the processed image signal of the selected program is met by cathode ray tube (CRT) 24 (Fig 2).

In considering claim 14,

The claimed wherein the step of displaying the processed image signal of the selected program is controlled in accordance with the video encoded parameters is met where CRT 24 is controlled by video signal processing unit 12 which receives the separated video via separation unit 8 and the control signal via control unit 16. The encoded genre information which is encoded is detected via data detecting unit 14 and decoded via control unit 16, which then implements control of video signal processing unit 12 and CRT 24 (Fig 2).

In considering claims 16, 19 and 22,

Kim does not specifically disclose the encoding parameters being selected from the group consisting of profile/level designation, number of horizontal pixels,

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number of vertical lines, aspect ratio, bit rate, frame rate, color initial value, conversion characteristic, matrix coefficient, and repeat first flag.

The parameters as claimed above, include notoriously well known parameters which a digital stream may include. Therefore, the examiner takes "OFFICIAL NOTICE" in regards to a signal encoded with information from the group as claimed above.

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to modify Kim which discloses the reception of an analog signal and additional encoded information in order to enhance the display automatically for the viewer, by also receiving additional information (as claimed) related to the received signal which in order to provide the user/system the ability to process/decode/display the signal based upon the signals characteristics/parameters.

In considering claims 17, 20 and 23,

Kim does not specifically disclose controlling the display setting from the group of noise reduction, beam velocity modulation and gamma correction.

The display settings as claimed above, include notoriously well known settings which a display system utilizes in order to display a coherent picture.

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to modify Kim which discloses the reception of an analog signal and additional encoded information in order to enhance the display automatically for the viewer, by also controlling other display settings (as claimed) in order to provide the user the ability to view an optimized/ideal picture.

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3c. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim, US 6,188,439 in view of Moon, US 6,501,510 and Yoneda US 6,609,251.

In considering claims 2 and 9,

The combination of Kim/Moon does not disclose a transport stream and service information included in the stream.

As stated above, Kim discloses the reception of an analog signal, and Moon discloses the reception of both analog and digital signals. Although, the reception of digital signal via a transport stream in which a parameter is acquired from the included service information is conventional, the examiner nonetheless incorporates Yoneda, US 6,609,251.

The examiner incorporates Yoneda, US 6,609,251 which discloses a receiver which extracts a program from a transport stream, and acquires parameters of the signals from the service information. Specifically, Yoneda identifies the scanning method of the received signal, in order to properly decode and display the video signal (i.e. interlace or non-interlace).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Kim and Moon, which discloses receiving an both analog/digital broadcast which also includes additional encoded information in the VBI used to control the display of the received picture, by also receiving the broadcast/additional encoded information in the digital broadcast (transport stream) to provide the user the ability/option to

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view a higher definition and ideally a higher quality picture than the analog broadcast.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (703) 305-9871. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John W. Miller, can be reached at (703)305-4795.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

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(FAX) 703-305-7786

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BRIAN P. YENKE
Primary Examiner
Art Unit 2614



B.P.Y.
20 July 2004